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January 29, 2007
264204.PC.70/MIPC.C206Q

Ms. Paula Bisson
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Subject: Notification Regarding Self-implementing On-site Cleanup and Disposal of Polychlorinated Biphenyl Remediation Waste at Polychlorinated Biphenyl Sites Building 116 AL#01 and AL#02 in Investigation Area C2, Eastern Early Transfer Parcel, Lennar Mare Island, Vallejo, California

Dear Ms. Bisson:

CH2M HILL prepared this letter in compliance with the Consent Agreement and Final Order between United States Environmental Protection Agency (USEPA) and the United States Department of the Navy (Navy), with the City of Vallejo and Lennar Mare Island, LLC (LMI), as intervenors (USEPA et al. 2001). The Consent Agreement and Final Order sets forth the polychlorinated biphenyl (PCB)-related requirements that must be met to satisfy the Toxic Substances Control Act (TSCA) for the Eastern Early Transfer Parcel of Mare Island.

Using visual site surveys and reviews of historical records, building closure reports, and databases of electrical equipment, the Navy identified sites where PCB-containing equipment was located, PCB spills were documented, or contamination was suspected because of building history or visible stains (Tetra Tech Environmental Management, Inc., [TtEMI] 1998). Navy personnel from Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS), conducted interim PCB assessments and performed cleanup actions (e.g., washing, scabbling, excavation) in accordance with technical work documents (TWDs), where necessary. Following the SSPORTS interim PCB assessments and necessary cleanup actions, TtEMI personnel collected samples either to confirm SSPORTS findings that no cleanup was necessary or to determine the effectiveness of the cleanup actions. Remaining PCB concentrations indicate that additional cleanup action is necessary at PCB Site Building 116 AL#01, the floor of the former transformer room, excluding the drain, and PCB Site Building 116 AL#02, the floor drain located in the southeast corner of the former transformer room (Figure 2).

Background

Building 116, including the former transformer room, is located in Investigation Area (IA) C2 (Figure 1). Building 116 was built in 1905 and initially served as a production shop. Building 116 is west of Nimitz (formerly California) Avenue, east of Railroad Avenue, north of Rickover Street, and south of 8th Street, in an area designated to remain in the historic core of Mare Island. According to the *Preliminary Land Use Plan* (SWA Group 2000), the proposed future use for Building 116 is industrial. Figure 2 shows the locations of PCB Sites Building 116 AL#01 and AL#02 in IA C2. Although Building 116 is not scheduled for deconstruction, the roof, walls, and floor of the former transformer room containing PCB Sites Building 116 AL#01 and AL#02 will be deconstructed. The historic significance of this Building 116 was reviewed, and it was determined that the former transformer room attached to Building 116 does not have the same historic significance as Building 116 and, therefore, can be deconstructed (Siler 2006, pers. comm.).

Two PCB sites associated with Building 116 are listed in the Consent Agreement for the Eastern Early Transfer Parcel at Mare Island (LMI et al. 2001): AL#01 and AL#02. This letter addresses both PCB Site Building 116 AL#01 (floor of former transformer room attached to Building 116) and PCB Site Building 116 AL#02 (floor drain inside the transformer room). Documentation of Navy PCB site assessment sampling, cleanup actions, and confirmation sampling for the two Building 116 PCB sites is contained in the *Final Basewide Polychlorinated Biphenyl Confirmation Sampling Summary Report* (TtEMI 1998), in the section for Parcel 04-B1.

In accordance with the provisions of TSCA, and as stated in Title 40 of the Code of Federal Regulations (CFR), Part 761.61(a)(3), notification is required at least 30 days before the start of a cleanup action at a PCB site. This letter provides the required notification for cleanup at PCB Sites Building 116 AL#01 and AL#02. The cleanup action at PCB Sites Building 116 AL#01 and AL#02 will be in accordance with 40 CFR 761.61(a) - self-implementing, on-site cleanup and disposal of PCB remediation waste. This notification includes the nature, location, and extent of PCB contamination, a summary of previous sampling and cleanup actions, a cleanup plan to address remaining PCB concentrations, and certification that the sampling plans and analysis procedures used to characterize this site are on file and available for USEPA inspection.

Nature of Contamination – 40 CFR 761.61(a)(3)(i)(A)

PCB Sites Building 116 AL#01 and AL#02 are located in a small structure attached to Building 116, whose dimensions are approximately 11 by 25 feet (275 square feet). The structure is a former indoor transformer site consisting of a concrete floor, walls, and associated electrical conduit and electrical boxes. The transformers have been removed and no active electrical equipment is present; new transformers have been installed on a new pad located outside the initial assessment location. PCB contamination has been identified

throughout the concrete floor and concrete walls inside the former transformer room (PCB Site Building 116 AL#01), and the floor drain area (PCB Site Building 116 AL#02). The affected matrices are concrete and soil.

During the Navy's initial site inspection in June 1996, the maximum PCB concentration detected in the concrete floor at PCB Site Building 116 AL#01 was 53,400 milligrams per kilogram (mg/kg). Because the PCBs were detected at concentrations above the 50.0-mg/kg action level, the transformer room did not comply with TSCA and remediation was performed by the Navy.

Summary of Previous Sampling – 40 CFR 761.61 (a)(3)(i)(B)

Tables 1 and 2 provide summaries of the previous sampling at PCB Sites Building 116 AL#01 and AL#02, respectively. The tables include the sample numbers, matrices, dates, and total PCB concentrations (or laboratory reporting limits if PCBs were not detected). The samples were analyzed for PCBs using USEPA Methods SW8080, SW8081, or SW8082.

PCB Site Building 116 AL#01

The transformer room is a small structure, approximately 11 by 25 feet, attached to the western end of Building 116. As part of the initial assessment at PCB Sites Building 116 AL#01 and AL#02, SSPORTS personnel collected six samples (6150-0154 through 6150-0159) on June 4, 1996, in stained areas of the concrete floor (SSPORTS 1996a). PCBs were detected in four samples, at concentrations of 119 (6150-0154), 4 (6150-0155), 788 (6150-0156), and 53,400 mg/kg (6150-0157). PCB concentrations were below reporting limits in samples 6150-0158 (less than 1 mg/kg) and 6150-0159 (less than 5 mg/kg). Collection locations for these two samples were not provided in historical data for this site. Based on the analytical results for these six samples, SSPORTS issued TWD 96-1350 on October 23, 1996, to remove contamination in the former transformer room (SSPORTS 1996b).

On February 13, 1997, before cleanup activities were performed, 28 solid floor and wall samples (7037-0064 through 7037-0094) and 5 wipe samples (7307-0100 through 7307-0104) were collected from the floor in PCB Site Building 116 AL#01 (Figure 2) (SSPORTS 1996a). PCBs were detected in 27 solid samples, at concentrations ranging from 1.2 to 15,100 mg/kg. PCBs were detected in four wipe samples, at concentrations ranging from 28 to 25,200 micrograms per 100 square centimeters (µg/100 cm^2). Wipe sample locations and media were not provided with the historical data for this site. Eight additional samples (7135-0082 through 7135-0089) were collected in PCB Site Building 116 AL#01 on June 10, 1997. PCB concentrations ranged from 1.7 to 25 mg/kg in those samples.

In July 1997, the Navy performed cleanup in accordance with TWD 96-1350 to remove elevated concentrations of PCBs in the concrete floor of PCB Site Building 116 AL#01. Scabbling was performed on the floor of the site to specified depths according to PCB concentrations. Area A (concentrations of 4 and 119 mg/kg) was scabbled to a depth of 0.25 inch below ground surface (bgs), Area B (maximum concentration of 788 mg/kg) was

scabbled to 0.5 inch bgs, and Area C (maximum concentration of 53,400 mg/kg) was scabbled to 0.75 inch bgs. Area D (sides of utility vault) was scabbled to 0.25 inch bgs in unstained areas and to 0.75 inch where stains were visible. The locations of these areas are presented in Figure 2. Additional abatement included double-washing with kerosene and rinsing accessible conduit and metal support surfaces as high as 12 inches above the floor, utility vault cover plates, and steel rails, in accordance with the TWD (SSPORTS 1996b).

TtEMI personnel collected two confirmation samples at PCB Site Building 116 AL#01 on July 16, 1997. PCBs were detected at a concentration of 0.06J[1] mg/kg in sample PC1441, and at a concentration of 0.4J mg/kg in sample PC1442 (TtEMI 1998) (Figure 2). Based on these results, PCB assessment and cleanup activities were considered complete (SSPORTS 1996a; TtEMI 1998).

On October 20, 2006, CH2M HILL conducted a soil boring investigation to evaluate the vertical extent of PCB contamination at PCB Sites Building 116 AL#01 and AL#02. Three soil borings (B116AL01-GB0101, B116AL01-GB-0103, and B116AL01-GB0106) were advanced at PCB Site Building 116 AL#01 to an approximate depth of 10 feet bgs and soil samples were collected at 2, 4, 6, and 9 feet bgs (Figure 2). Boring B116AL01-GB0101 was advanced to an approximate depth of 4 feet bgs and samples were collected at 2 and 4 feet bgs. Total PCB concentrations in soil sample B116AL01-GB0102-S2 were 0.05 mg/kg. Total PCB concentrations in all other soil samples collected during this investigation were below reporting limits (less than 0.033 mg/kg to less than 0.051 mg/kg). One composite sample was collected from concrete removed from boring locations B116AL01-GB0101 through B116AL01-GB0103 and B116AL01-GB0106. Aroclor-1260 was detected at a concentration of 923.0 mg/kg in composite concrete sample B116AL01-CH0107-CO.

PCB Site Building 116 AL#02

On February 13, 1997, before performing cleanup activities at PCB Site Building 116 AL#01, SSPORTS personnel collected three samples (7037-0066, 7037-0070, and 7037-0077) from PCB Site Building 116 AL#02 (Figure 2). PCBs were detected at concentrations of 2.2 mg/kg in sample 7037-0066, 2.5 mg/kg in sample 7037-0070, and 18.4 mg/kg in sample 7037-0077.

On June 9, 1997, SSPORTS personnel collected one wipe sample (7135-0055) from the floor drain in the northern end of PCB Site Building 116 AL#02 (SSPORTS 1996a). PCBs were detected at a concentration of 69 µg/100 cm^2 in that wipe sample. Analytical results were provided with historical data for this site, but the exact sample collection location could not be identified. The sample location has been estimated on Figure 2 based on exiting historical information which shows the location of the former floor drain. This sample was collected after abatement was performed under TWD 96-1350. Because of the elevated PCB concentrations in the sample, SSPORTS personnel issued TWD 96-1350 Revision A (SSPORTS 1998), which included removing concrete within a 1-foot radius of the floor drain

[1] A "J" indicates an estimated concentration.

and excavating and removing the underlying crushed rock foundation and soil. Remediation under TWD 96-1350 Revision A was performed in January 1999. Resampling was not performed under this TWD.

In January 1999, three samples (9-0091, 9-0092, and 9-0102) were collected from PCB Site Building 116 AL#02 during implementation of TWD 96-1350 Revision A (Table 2 and Figure 2). Laboratory reports for these samples indicated that sample 9-0091 was collected from sediment in the drain pipe (6.6 mg/kg), sample 9-0092 was collected from soil beneath the drain pipe (1.0 mg/kg), and sample 9-0102 was collected from the drain pipe interior (4.9 mg/kg). The drain pipe and concrete overlying the pipe were removed during the implementation of TWD 96-1350 Revision A and disposed of off site.

TtEMI personnel collected two confirmation samples (PC7109 and PC7110) at PCB Site Building 116 AL#02 on February 19, 1999 (Table 2 and Figure 2). PCBs were detected at a concentration of 0.2 mg/kg in sample PC7109, collected from soil beneath the former drain pipe, and at a concentration of 5.0 mg/kg in sample PC7110, concrete collected from the former drain location (TtEMI 1998). Based on these results, PCB assessment and cleanup activities were considered complete (SSPORTS 1998; TtEMI 1998).

On October 20, 2006, CH2M HILL conducted a soil boring investigation to evaluate the vertical extent of PCB contamination at PCB Sites Building 116 AL#01 and AL#02. Two soil borings (B116AL01-GB0104 and B116AL01-GB0105) were advanced to approximately 10 feet bgs and soil samples were collected at 2, 4, 6, and 9 feet bgs. PCBs were detected in two samples; B116AL01-GB0104-S2 at a total concentration 4.5 mg/kg and B116AL01-GB0105-S2 at a total concentration of 0.23 mg/kg. Total PCB concentrations in all other soil samples from these borings were below reporting limits (less than 0.032 mg/kg to less than 0.038 mg/kg).

Location and Extent of Contaminated Area – 40 CFR 761.61(a)(3)(i)(C)

Sample results indicate that PCB Sites Building 116 AL#01 and AL#02 contain elevated concentrations of PCBs. PCB concentrations in 48 solid samples were greater than the 1.0-mg/kg cleanup standard for porous media in high-occupancy areas. Five wipe samples had PCB concentrations greater than the 10.0-µg/100 cm^2 cleanup standard for nonporous media in high-occupancy areas (Tables 1 and 2). Figure 2 shows the remaining PCB concentrations at PCB Sites Building 116 AL#01 and AL#02.

Cleanup Plan – 40 CFR 761.61(a)(3)(i)(D)

PCB concentrations detected in concrete and soil from PCB Sites Building 116 AL#01 and AL#02 exceed the TSCA cleanup levels of 1.0 mg/kg for porous media in high-occupancy areas and 10 µg/100 cm^2 for nonporous media in high-occupancy areas. Therefore, the proposed cleanup action for PCB Sites Building 116 AL#01 and AL#02 is complete deconstruction of the roof, walls, and floor of the former transformer room. The

southeastern wall of this structure is shared with Building 116. However, because this wall is sheet metal, the sheet metal will be removed without compromising the structural integrity of Building 116.

PCB concentrations detected in soil sample B116AL01-GB0104-S2 (4.5 mg/kg) exceed the 1.0-mg/kg cleanup level for porous media in high occupancy areas. A 3-square-foot area centered on boring location B116AL01-GB0104 will be removed to a depth of 2 feet. Verification samples will be collected on a grid of 1.6-foot (0.5-meter) spacing. Soil removal will continue until verification sample concentrations are below the 1.0-mg/kg TSCA cleanup goal. Although PCB Sites Building 116 AL#01 and AL#02 are listed as being indoors, because they are inside a structure that will be deconstructed, this work will be performed in accordance with the *Final Interim Removal Action Work Plan for Outdoor Polychlorinated Biphenyl Sites in the Eastern Early Transfer Parcel* (CH2M HILL 2005) and 40 CFR 761.61(a).

Figure 3 shows the verification sample locations for PCB Sites Building 116 AL#01 and AL#02. After the former transformer room is deconstructed, verification samples will be collected in accordance with 40 CFR 761, Subpart O. Verification samples will be collected using a grid of approximately 6.5-foot (2-meter) spacing. Six discrete samples will be collected from each grid cell and combined into a single composite sample. For grid cells that, because of their position adjacent to a wall, are approximately half the size of a typical cell, three discrete samples will be collected and combined into a single composite sample. For cells that are approximately 9 square feet (about 1 square meter), four discrete samples will be collected and combined into a single composite sample. Figure 3 identifies the discrete collection locations that are planned for each composite sample. However, the final number of verification samples will be determined in the field based on the final dimensions of the removal area.

Samples will be analyzed in accordance with the *Quality Assurance Project Plan* (CH2M HILL 2001), using USEPA Method SW8082. Health and safety will be maintained in accordance with the *Health and Safety Plan for PCB Site Sampling and Remediation* (Appendix A to the *Final Polychlorinated Biphenyl Work Plan*; CH2M HILL 2003). Standard operating procedures (SOPs) for the fieldwork and issues regarding permits and notifications and site security, access, restoration, and demobilization were addressed in the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003).

PCB-containing wastes generated from the cleanup will be disposed of off site at a Class II landfill. However, final disposition of the waste will be determined based on results of waste characterization analysis. PCB waste will be managed in accordance with CH2M HILL Health, Safety, and the Environment SOP No. 82 (HSE-82), which was provided in the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003).

The former transformer room adjacent to Building 116 will be deconstructed in March 2007. In accordance with 40 CFR 761.61(a)(4), the goal for this cleanup is to achieve remaining PCB concentrations less than or equal to 1.0 mg/kg (porous) and 10.0 $\mu g/100\ cm^2$

(nonporous) for this high-occupancy area, as determined by the verification sampling. Removal and excavation will continue until verification sampling results indicate that this cleanup goal has been met.

Polychlorinated Biphenyl Site Closure Process

Figure 4 illustrates the site closure process for PCB Sites Building 116 AL#01 and AL#02 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and TSCA. Under CERCLA, a no further action (NFA) determination is appropriate if no potential source and no PCB contamination are present at the site (CH2M HILL 2005). Even if a potential source of PCB contamination is present in machinery or building materials, NFA is appropriate under CERCLA if there has been no release of PCBs to soil or groundwater and no visible pathway exists for migration of PCBs to the soil or groundwater (CH2M HILL 2005); such sites will be evaluated under TSCA for site closure in accordance with the Consent Agreement and Final Order (USEPA et al. 2001). If there has been a known release to soil or groundwater, NFA is also appropriate if the detected PCB concentrations in soil or groundwater do not exceed the applicable preliminary remediation goal, or if results of a site-specific risk evaluation demonstrate that potential risks associated with exposure to residual PCBs are within the risk-management range generally used to determine whether cleanup is necessary.

Certification – 40 CFR 761.61(a)(3)(i)(E)

Project files for PCB Sites Building 116 AL#01 and AL#02 are maintained in the CH2M HILL office at 155 Grand Avenue, Suite 1000, in Oakland, California. Attachment 1 contains the written certification, signed by LMI (the owner of the property where the cleanup site is located) and CH2M HILL (the party conducting the cleanup), documenting that the sampling plans and procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the above-mentioned location and available for USEPA inspection.

Conclusions

The maximum remaining verifiable PCB concentrations at PCB Sites Building 116 AL#01 and AL#02 are 923 mg/kg in concrete (composite sample B116AL01-GB0107-CO) and 4.5 mg/kg in soil (sample B116AL01-GB0104-S2). Therefore, the entire former transformer room attached to Building 116 will be deconstructed. The area to be deconstructed will be approximately 11 by 25 feet (approximately 275 square feet). Localized soil removal will occur at boring location B116AL01-GB0104. This cleanup action, planned for March 2007, will achieve a residual PCB concentration that complies with the 40 CFR 761.61(a)(4) requirements for high-occupancy areas.

Please submit your approval of this notification for PCB Sites Building 116 AL#01 and AL#02 to Michael Sanchez at the above address or via email at Michael.Sanchez@ch2m.com within 30 calendar days of receiving this letter. If you have questions or concerns regarding this notification, please contact Michael Sanchez at 530/229-3310 or Steve Farley at 707/562-1015, extension 103.

Sincerely,

CH2M HILL

Michael Sanchez
Project Manager

Stephen M. Farley, P.G.
Quality Control Manager

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Enclosures: Tables 1 and 2, Figures 1 through 4, Attachment 1

References

CH2M HILL. 2001. *Quality Assurance Project Plan.* November.

_____. 2003. *Final Polychlorinated Biphenyl Work Plan.* March 7.

_____. 2005. *Final Interim Removal Action Work Plan for Outdoor Polychlorinated Biphenyl Sites in the Eastern Early Transfer Parcel.* April 27.

SWA Group. 2000. *Preliminary Land Use Plan.* May 23.

Lennar Mare Island, LLC (LMI), the City of Vallejo, and the State of California Environmental Protection Agency, Department of Toxic Substances Control. 2001. *Consent Agreement Between Lennar Mare Island, the City of Vallejo, and the State of California, California Environmental Protection Agency, Department of Toxic Substances Control.* April 16.

Siler, Neal/Lennar Mare Island, LLC (LMI). 2006. Personal communication with Michael Sanchez/CH2M HILL. September 28.

Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1996a. *Final Polychlorinated Biphenyl (PCB) Assessment for Property Leasing Conditions of Building 116.* July 22.

_____. 1996b. *PCB Decontamination Technical Work Document (TWD). PCB-Contaminated Spill Site Transformer Pad. TWD No. 96-1350. Bldg. No. 116.* October 23.

_____. 1998. *PCB Decontamination Technical Work Document (TWD). PCB-Contaminated Spill Site Transformer Pad. TWD No. 96-1350 Rev. A. Bldg. No. 116.* October 30.

Tetra Tech Environmental Management, Inc. (TtEMI). 1998. *Final Basewide Polychlorinated Biphenyl Confirmation Sampling Summary Report.* February 13.

United States Environmental Protection Agency (USEPA), United States Department of the Navy (Navy), the City of Vallejo, and Lennar Mare Island, LLC (LMI). 2001. *Complaint/Consent Agreement and Final Order Between Lennar Mare Island, the City of Vallejo, the U.S. Department of the Navy, and the U.S. Environmental Protection Agency Region IX.* EPA Docket No. TSCA-9-2002-0002. December 20.

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TABLE 1
Sample Results for PCB Site Building 116 AL#01, Eastern Early Transfer Parcel
PCB Sites, Lennar Mare Island, Vallejo, California

Sample Number	Sample Matrix	Sample Date	Total PCB Concentration [a]	Comments
6150-0154	Concrete	06/04/96	119 mg/kg	Stain-specific sample
6150-0155	Concrete	06/04/96	4.0 mg/kg	Stain-specific sample
6150-0156	Concrete	06/04/96	788 mg/kg	Stain-specific sample
6150-0157	Concrete	06/04/96	53,400 mg/kg	Stain-specific sample
6150-0158	Concrete	06/04/96	<1.0 mg/kg	Stain-specific sample
6150-0159	Gravel	06/04/96	<1.0 mg/kg	Stain-specific sample
7037-0064	Concrete	02/13/97	<1.0 mg/kg	Pre-TWD sample
7037-0065	Concrete	02/13/97	4.6 mg/kg	Pre-TWD sample
7037-0067	Concrete	02/13/97	1.2 mg/kg	Pre-TWD sample
7037-0068	Concrete	02/13/97	2.5 mg/kg	Pre-TWD sample
7037-0069	Concrete	02/13/97	10.9 mg/kg	Pre-TWD sample
7037-0071	Concrete	02/13/97	2.1 mg/kg	Pre-TWD sample
7037-0072	Concrete	02/13/97	1.9 mg/kg	Pre-TWD sample
7037-0073	Concrete	02/13/97	82 mg/kg	Pre-TWD sample
7037-0074	Concrete	02/13/97	68 mg/kg	Pre-TWD sample
7037-0075	Concrete	02/13/97	23.5 mg/kg	Pre-TWD sample
7037-0076	Concrete	02/13/97	6.8 mg/kg	Pre-TWD sample
7037-0078	Concrete	02/13/97	34.5 mg/kg	Pre-TWD sample
7037-0079	Concrete	02/13/97	41 mg/kg	Pre-TWD sample
7037-0080	Concrete	02/13/97	20.5 mg/kg	Pre-TWD sample
7037-0081	Concrete	02/13/97	620 mg/kg	Pre-TWD sample
7037-0082	Concrete	02/13/97	620 mg/kg	Pre-TWD sample
7037-0083	Concrete	02/13/97	99 mg/kg	Pre-TWD sample
7037-0084	Concrete	02/13/97	670 mg/kg	Pre-TWD sample
7037-0085	Concrete	02/13/97	15,100 mg/kg	Pre-TWD sample
7037-0086	Concrete	02/13/97	7,600 mg/kg	Pre-TWD sample
7037-0087	Concrete	02/13/97	6,400 mg/kg	Pre-TWD sample
7037-0088	Concrete	02/13/97	11,200 mg/kg	Pre-TWD sample
7037-0089	Concrete	02/13/97	10,000 mg/kg	Pre-TWD sample
7037-0090	Concrete	02/13/97	11,400 mg/kg	Pre-TWD sample
7037-0091	Concrete	02/13/97	204 mg/kg	Pre-TWD sample
7037-0092	Concrete	02/13/97	1,230 mg/kg	Pre-TWD sample
7037-0093	Concrete	02/13/97	7,000 mg/kg	Pre-TWD sample
7037-0094	Concrete	02/13/97	3.8 mg/kg	Pre-TWD sample
7037-0100	Other	02/13/97	25,200 µg/100 cm²	Pre-TWD sample
7037-0101	Other	02/13/97	190 µg/100 cm²	Pre-TWD sample
7037-0102	Other	02/13/97	2,450 µg/100 cm²	Pre-TWD sample
7037-0103	Other	02/13/97	28 µg/100 cm²	Pre-TWD sample
7037-0104	Other	02/13/97	<1.0 µg/100 cm²	Pre-TWD sample
7135-0082	Concrete	06/10/97	12.4 mg/kg	Pre-TWD sample

TABLE 1
Sample Results for PCB Site Building 116 AL#01, Eastern Early Transfer Parcel
PCB Sites, Lennar Mare Island, Vallejo, California

Sample Number	Sample Matrix	Sample Date	Total PCB Concentration [a]	Comments
7135-0083	Concrete	06/10/97	2.6 mg/kg	Pre-TWD sample
7135-0084	Concrete	06/10/97	1.7 mg/kg	Pre-TWD sample
7135-0085	Concrete	06/10/97	3.5 mg/kg	Pre-TWD sample
7135-0086	Concrete	06/10/97	7.6 mg/kg	Pre-TWD sample
7135-0087	Concrete	06/10/97	25 mg/kg	Pre-TWD sample
7135-0088	Concrete	06/10/97	2.3 mg/kg	Pre-TWD sample
7135-0089	Concrete	06/10/97	2.0 mg/kg	Pre-TWD sample
PC1441	Concrete	07/16/97	0.06J mg/kg	Post-TWD sample; TtEMI confirmation sample
PC1442	Concrete	07/16/97	0.4J mg/kg	Post-TWD sample; TtEMI confirmation sample
B116AL01-GB0101-S2	Soil	10/20/06	0.05 mg/kg	Arcolor-1260
B116AL01-GB0101-S4	Soil	10/20/06	<0.035 mg/kg	Arcolor-1260
B116AL01-GB0101-S6	Soil	10/20/06	<0.04 mg/kg	Arcolor-1260
B116AL01-GB0101-S9	Soil	10/20/06	<0.035 mg/kg	Arcolor-1260
B116AL01-GB0102-S2	Soil	10/20/06	<0.036 mg/kg	Arcolor-1260
B116AL01-GB0102-S4	Soil	10/20/06	<0.038 mg/kg	Arcolor-1260
B116AL01-GB0103-S2	Soil	10/20/06	<0.033 mg/kg	Arcolor-1260
B116AL01-GB0103-S4	Soil	10/20/06	<0.038 mg/kg	Arcolor-1260
B116AL01-GB0103-S6	Soil	10/20/06	<0.039 mg/kg	Arcolor-1260
B116AL01-GB0103-S9	Soil	10/20/06	<0.051 mg/kg	Arcolor-1260
B116AL01-GB0106-S2	Soil	10/20/06	<0.038 mg/kg	Arcolor-1260
B116AL01-GB0106-S4	Soil	10/20/06	<0.039 mg/kg	Arcolor-1260
B116AL01-GB0106-S6	Soil	10/20/06	<0.036 mg/kg	Arcolor-1260
B116AL01-GB0106-S9	Soil	10/20/06	<0.034 mg/kg	Arcolor-1260
B116AL01-CH0107-CO	Composite concrete	10/20/06	923 mg/kg	Arcolor-1260

[a]For samples collected by CH2M HILL Total PCB's are calculated by summing all of the detected Aroclor's or by using a proxy value of one half the reporting limit for historically detected Aroclor's and adding this to detected Aroclor's.

Notes:

Sample numbers beginning with PC were collected by TtEMI. Sample numbers beginning with B were collected by CH2M HILL. Other samples were collected by SSPORTS.

µg/100 cm^2 = micrograms per 100 square centimeters
mg/kg = milligrams per kilogram
PCB = polychlorinated biphenyl
TWD = technical work document

TABLE 2
Sample Results for PCB Sites Building 116 AL#02, Eastern Early Transfer Parcel
PCB Sites, Lennar Mare Island, Vallejo, California

Sample Number	Sample Matrix	Sample Date	Total PCB Concentration [a]	Comments
7037-0066	Concrete	02/13/97	2.2 mg/kg	Pre-TWD sample
7037-0070	Concrete	02/13/97	2.5 mg/kg	Pre-TWD sample
7037-0077	Concrete	02/13/97	18.4 mg/kg	Pre-TWD sample
7135-0055	Oil	06/09/97	69 µg/100 cm^2	Pre-TWD sample
9-0091	Solid	01/21/99	6.6 mg/kg	Post-TWD sample; sediment in pipe
9-0092	Solid	01/21/99	1.0 mg/kg	Post-TWD sample; soil from beneath drain pipe
9-0102	Solid	01/25/99	4.9 mg/kg	Post-TWD sample; oil drain pipe interior
PC7109	Soil	02/19/99	0.2 mg/kg	Post-TWD sample; TtEMI confirmation sample
PC7110	Concrete	02/19/99	5.0 mg/kg	Post-TWD sample; TtEMI confirmation sample
B116AL01-GB0104-S2	Soil	10/20/06	4.5 mg/kg	Arcolor-1260
B116AL01-GB0104-S4	Soil	10/20/06	<0.036 mg/kg	Arcolor-1260
B116AL01-GB0104-S6	Soil	10/20/06	<0.035 mg/kg	Arcolor-1260
B116AL01-GB0104-S9	Soil	10/20/06	<0.036 mg/kg	Arcolor-1260
B116AL01-GB0105-S2	Soil	10/20/06	0.23 mg/kg	Arcolor-1260
B116AL01-GB0105-S4	Soil	10/20/06	<0.032 mg/kg	Arcolor-1260
B116AL01-GB0105-S6	Soil	10/20/06	<0.038 mg/kg	Arcolor-1260
B116AL01-GB0105-S9	Soil	10/20/06	<0.037 mg/kg	Arcolor-1260

[a] For samples collected by CH2M HILL Total PCB's are calculated by summing all of the detected Aroclor's or by using a proxy value of one half the reporting limit for historically detected Aroclor's and adding this to detected Aroclor's.

Notes:

Sample numbers beginning with PC were collected by TtEMI. Sample numbers beginning with B were collected by CH2M HILL. Other samples were collected by SSPORTS.

µg/100 cm^2 = micrograms per 100 square centimeters
mg/kg = milligrams per kilogram
PCB = polychlorinated biphenyl
TWD = technical work document

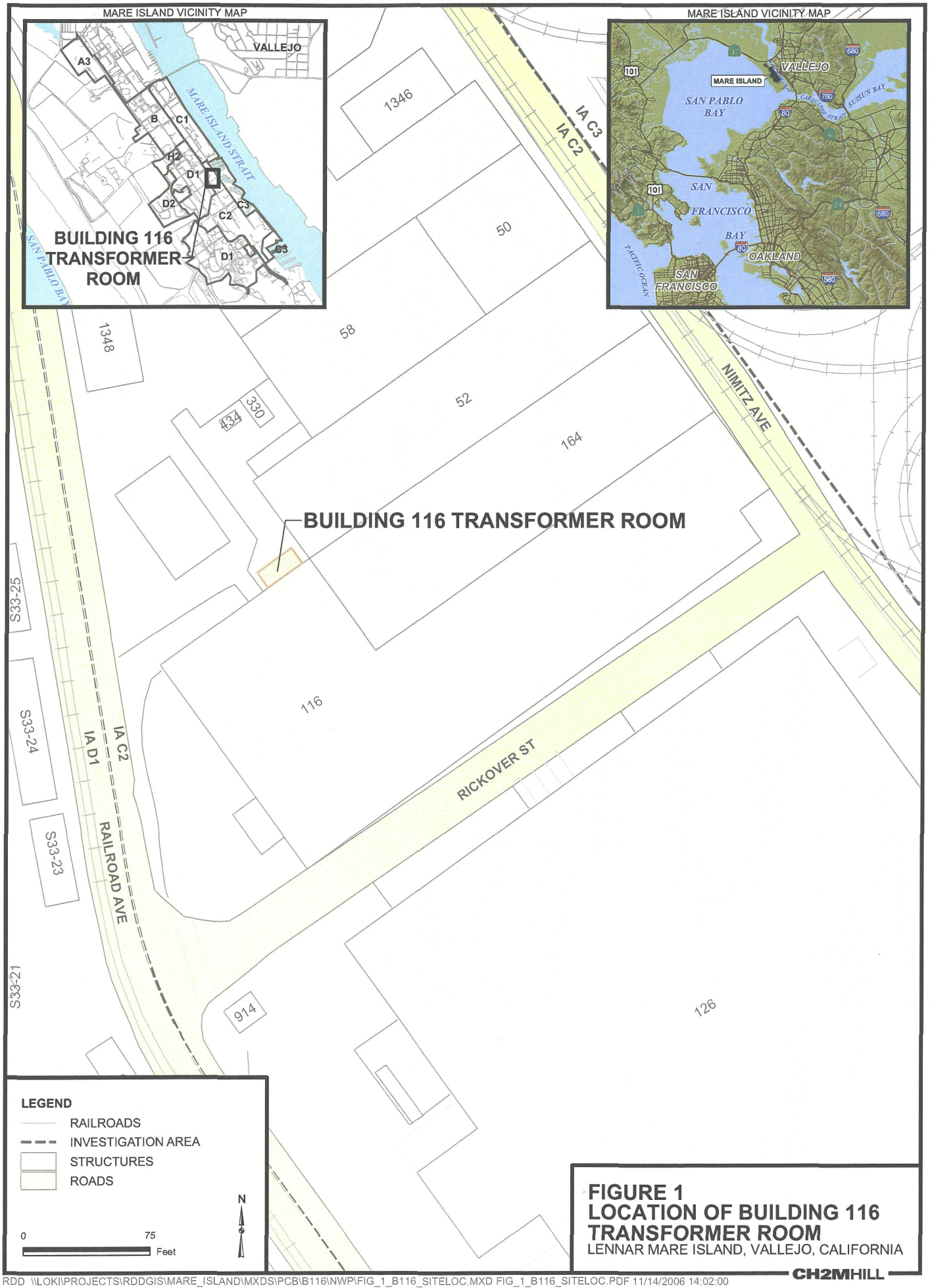


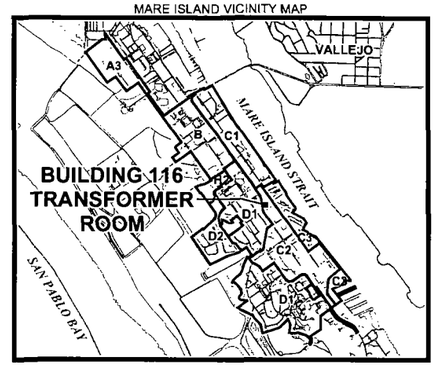
FIGURE 1
LOCATION OF BUILDING 116 TRANSFORMER ROOM
LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

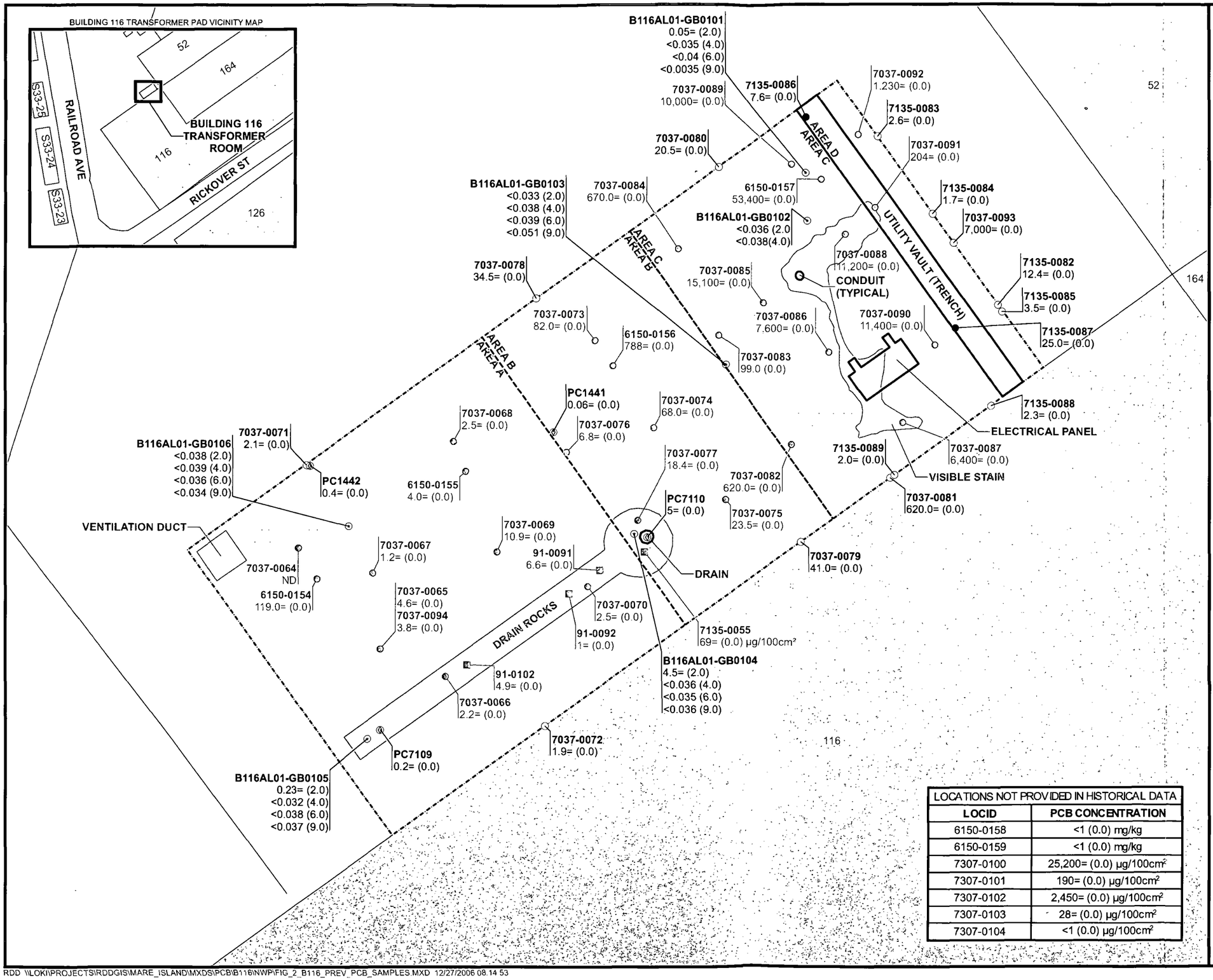
CH2MHILL

RDD \\LOKI\PROJECTS\RDDGIS\MARE_ISLAND\MXDS\PCB\B116\NWP\FIG_1_B116_SITELOC.MXD FIG_1_B116_SITELOC.PDF 11/14/2006 14:02:00

BUILDING 116 TRANSFORMER PAD VICINITY MAP

MARE ISLAND VICINITY MAP





LEGEND

- EXISTING PCB SAMPLE LOCATIONS
- REMOVED PCB SAMPLE LOCATIONS
- PCB SAMPLE LOCATIONS ON THE WALLS OF THE BUILDING
- CHIP SAMPLE LOCATIONS
- GEOPROBE SAMPLE
- REMOVED PCB SAMPLE – LOCATION ESTIMATED BASED ON HISTORICAL DATA
- SSPORTS SCABBLED AREAS
- PCB SITE BUILDING 116 AL#01
- PCB SITE BUILDING 116 AL#02
- STRUCTURES

SAMPLE LOCATION — 7037-0071
PCB CONCENTRATION (mg/kg) — 2.1= (0.0)
SAMPLE BEGINNING DEPTH (ft)

NOTES:
1. "=" = ANALYTE WAS DETECTED
2. **"MEDIUM GRAY LABELS"** = SAMPLE LOCATIONS REMOVED DURING DECONTAMINATION
3. **"BLACK LABELS"** = SAMPLE LOCATIONS EXISTING AT SITE
4. PCB CONCENTRATIONS ARE IN mg/kg UNLESS OTHERWISE STATED
5. COMPOSITE CONCRETE SAMPLE B116AL01-CH0107-CO (923 mg/kg) CONTAINED CONCRETE REMOVED FROM BORINGS B116AL01-GB0101 THROUGH B116AL01-GB0103 AND B116AL01-GB0106

LOCATIONS NOT PROVIDED IN HISTORICAL DATA	
LOCID	**PCB CONCENTRATION**
6150-0158	<1 (0.0) mg/kg
6150-0159	<1 (0.0) mg/kg
7307-0100	25,200= (0.0) µg/100cm²
7307-0101	190= (0.0) µg/100cm²
7307-0102	2,450= (0.0) µg/100cm²
7307-0103	28= (0.0) µg/100cm²
7307-0104	<1 (0.0) µg/100cm²

0 3 Feet

N

FIGURE 2
PCB SITES BUILDING 116 AL#01 AND AL#02 PREVIOUS PCB SAMPLE LOCATIONS

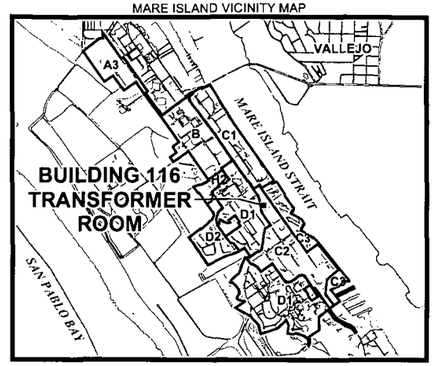
LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

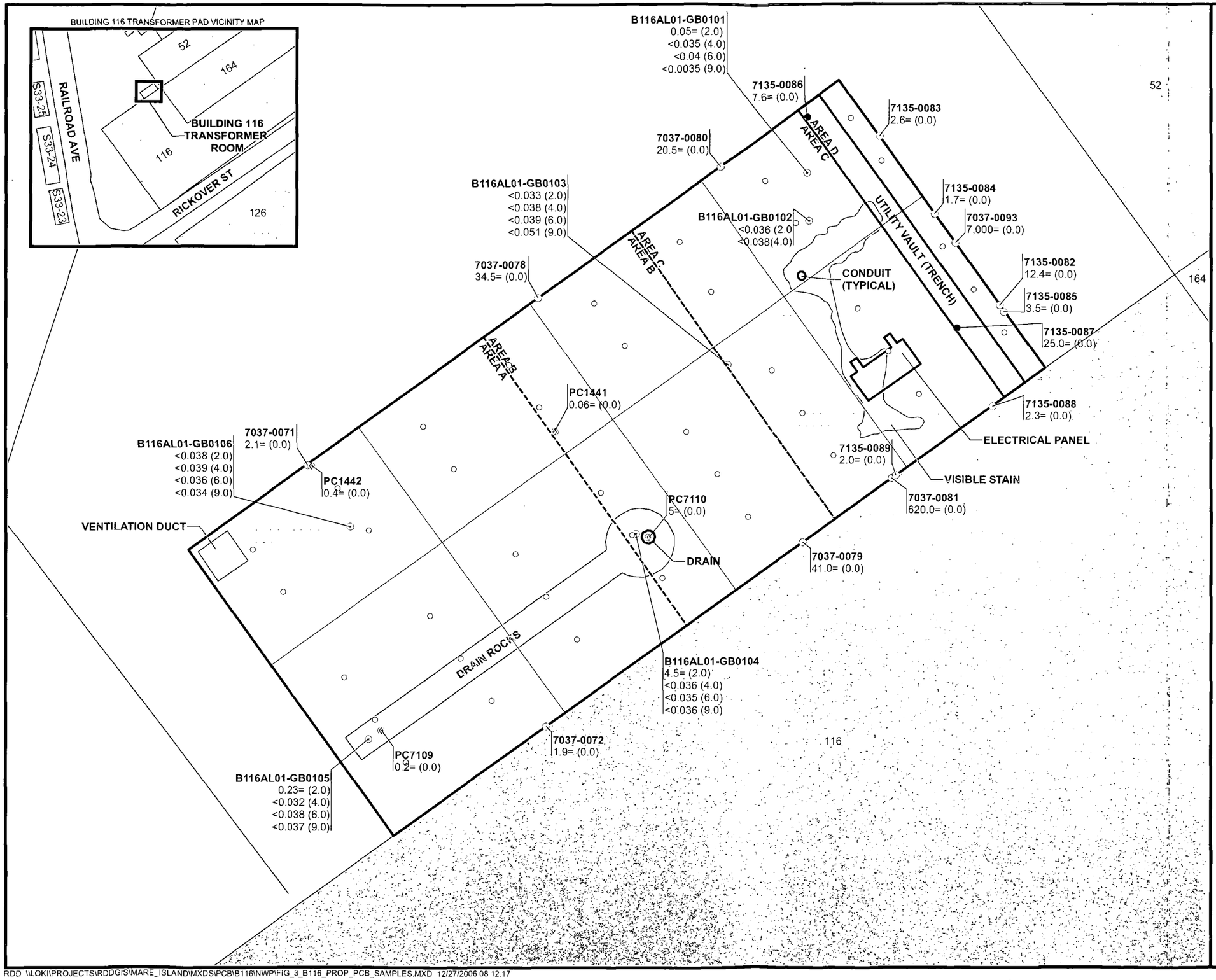
CH2MHILL

RDD \\LOKI\PROJECTS\RDDGIS\MARE_ISLAND\MXDS\PCB\B116\NWP\FIG_2_B116_PREV_PCB_SAMPLES.MXD 12/27/2006 08.14 53

BUILDING 116 TRANSFORMER PAD VICINITY MAP

MARE ISLAND VICINITY MAP





LEGEND

- EXISTING PCB SAMPLE LOCATIONS
- PCB SAMPLE LOCATIONS ON THE WALLS OF THE BUILDING
- CHIP SAMPLE LOCATIONS
- GEOPROBE SAMPLE
- COMPOSITE SAMPLE LOCATIONS
- VERIFICATION GRID (2-METER)
- PCB SITE BUILDING 116 AL#01
- PCB SITE BUILDING 116 AL#02
- SSPORTS SCABBLED AREAS
- PROPOSED REMOVAL AREA
- STRUCTURES

SAMPLE LOCATION — 7037-0071
PCB CONCENTRATION (mg/kg) — 2.1= (0.0)
SAMPLE BEGINNING DEPTH (ft)

NOTES:
1. "=" = ANALYTE WAS DETECTED
2. "MEDIUM GRAY LABELS" = SAMPLE LOCATIONS EXISTING AT SITE
3. PCB CONCENTRATIONS ARE IN mg/kg

0 3 Feet

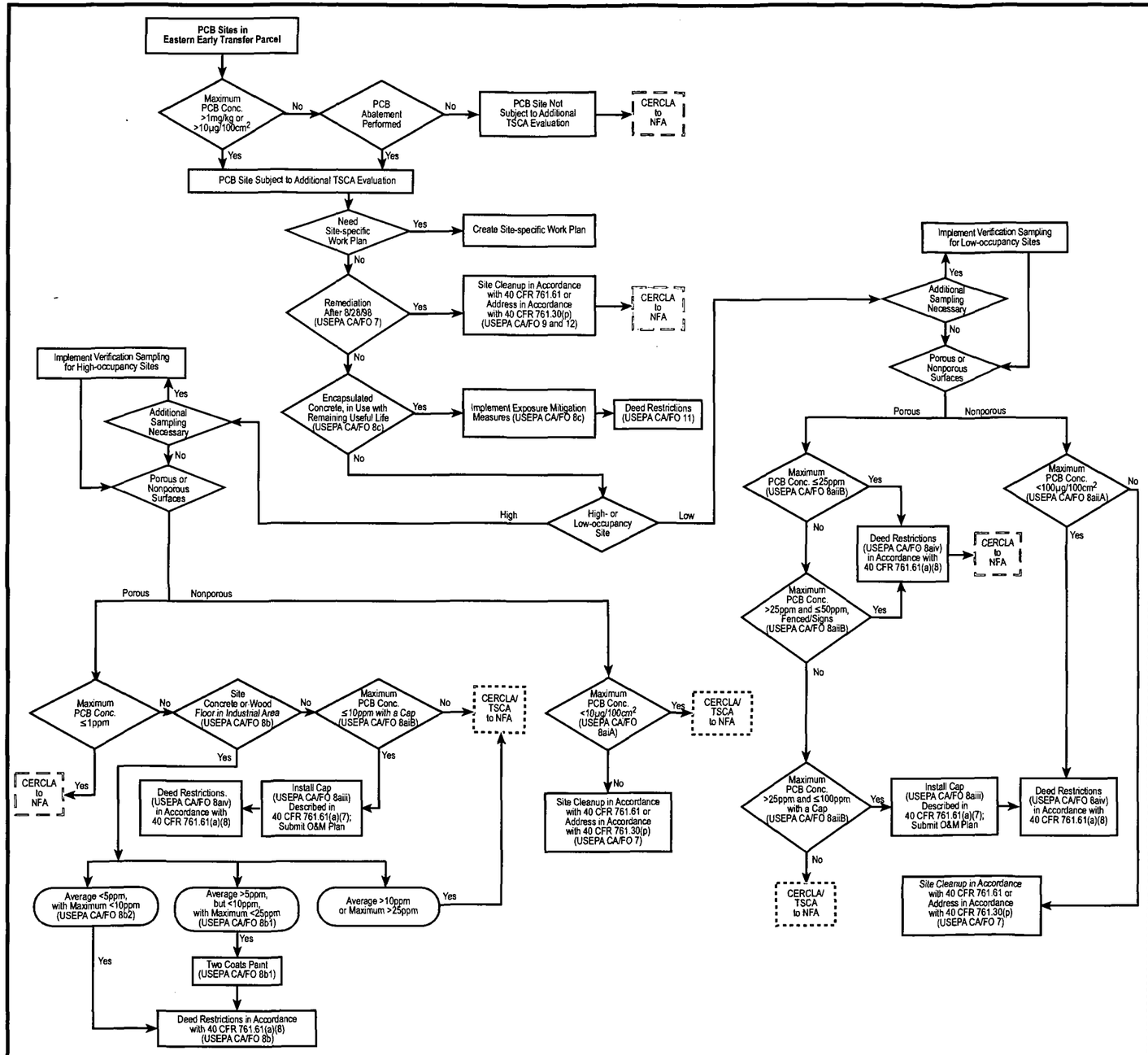
N

FIGURE 3
PCB SITES BUILDING 116 AL#01 AND AL#02 PROPOSED PCB SAMPLE LOCATIONS

LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

CH2MHILL

RDD \\LOKI\PROJECTS\RDDGIS\MARE_ISLAND\MXDS\PCB\B116\NWP\FIG_3_B116_PROP_PCB_SAMPLES.MXD 12/27/2006 08:12:17



NOTES:

USEPA CA/FO = USEPA Consent Agreement/Final Order paragraph number

NFA = No Further Action

O&M = Operations and Maintenance

PRG = Preliminary Remediation Goal

ES052006008RDD_24_Path to Closure (12/28/06)

FIGURE 4
PATH FOR PCB SITE CLOSURE
BUILDING 116 AL#01 and AL#02
LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

CH2MHILL

Attachment 1
Certification

ATTACHMENT 1

Certification

All sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the polychlorinated biphenyl (PCB) contamination at PCB Sites Building 116 AL#01 and AL#02 are on file at the CH2M HILL office at 155 Grand Avenue, Suite 1000, Oakland, California. These files are available for USEPA inspection.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Neal Siler/Lennar Mare Island, LLC (owner of the property where the cleanup site is located)

Stephen M. Farley, ~~P.G.~~/CH2M HILL (the party conducting the cleanup)